

HGSS Boundary Conditions

Current model assumes open boundary conditions at the model boundary. There are no known geological barriers to fluid flow in the model area. This assumption will be verified using the injectivity and pressure transient tests that will be performed on the NCV MS OB-1 well as outlined in the *Pre-Operational Testing Program*. In its current form, the GEM model's open boundary condition was designed by providing volume multipliers of 10,000 to the cells at the grid boundary in the i-j direction. There were no flow boundaries imposed in the vertical direction with low permeability of the Eau Claire shale and the pre-Cambrian basement acting as natural barriers to fluid flow.